



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: July 27, 1981 (9:10 AM - 12:00 Noon)

TO: DWPC/FOS and Records Unit

FROM: Region 1 - D.J. Connor *DJC*SUBJECT: WINNEBAGO COUNTY - Soterion, Inc - Complaint Investigation Environmental Protection Agency
State of Illinois

Interviewed: Gill R. Semans, Plant Manager and President

Accompanied by: Larry Prunty, DAPC/FOS, Rockford
Jack Holzer, DLPC/FOS, Rockford

Weather: Cloudy, 70°F

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Field Operations Section

AUG 13 1981

EPA Region 5 Records Ctr.



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The following is a report of observations made and information obtained during a visit to Soterion, Inc., 800 Watts Avenue, Rockton, IL 61072 (phone 815/624-7082 or 815/624-2011). The visit was made to investigate citizen complaints concerning polluted exhaust emissions and waste oil dumping.

1. The facility reclaims 400 mesh and finer high speed steel cuttings and the cooling oil which has contaminated it. This raw material is approximately 80% solids and 20% oil by weight. It is received in barrels by truck from plants in Wisconsin, Minnesota, South Carolina and Arkansas, among others. The solid portion is made up primarily of high speed steel powder contaminated with diatomaceous earth, grinding wheel powder and other debris. Semans explained that the facility can process about 100 tons per month but is operating below that level due to a depressed market for the finished product. He expects business to double in 4-5 months. Stockpiled in stacked barrels in building 2 were 750 tons of raw material.

2. The raw material is passed through a series of washes and settling basins so that the ultimate product is clean, dry high speed steel powder ready for resmelting. The oil removed is emulsified and purged of its high phosphorus content. The oil is then stored for scavenger pickup and resale. Stored in two 6,000 gallon and one 8,000 gallon above ground tanks were 20,000 gallons of oil. A smaller below ground tank is also used for oil storage. Two more used storage tanks of unknown capacity were laying outside awaiting refurbishing and installation.

3. Semans explained that process water is "treated" before discharge to a septic tank between buildings 1 and 2. An estimated 16,000 to 18,000 gallons are discharged each week. Treatment consists of pH adjustment, and removal of settleables and floatables. Analysis of this wastewater for Soterion revealed phosphorus levels between 480 and 700 mg/l. Samples will be collected for full analysis by Agency labs. Semans was informed that wastewater treatment and discharge requires a permit from the Agency. According to Semans, discharge of 5,000 gallons to the septic tank barely affects its liquid level. This might indicate a direct connection to sewers or drain tiles. Further testing is needed to determine the ultimate destination of discharged wastewater. Semans said he could find no plans for the septic system so the flow pattern is unknown.

4. In the transfer of materials and general plant operations, a considerable amount of oil and other contaminated liquids are spilled inside and outside the buildings. The bulk of the spillage can be removed with a company vacuum sweeper. A significant amount of residue remains, however, and during rains this residue is washed into nearby county storm sewers and onto adjoining properties. When questioned about resolution of the runoff problem, Semans proposed a runoff control and oil removal system. Again he was informed that such a system constitutes wastewater treatment and would require construction and operation permits from the Agency before it was installed. Apparently this same problem concerns county highway officials who earlier had told Soterion to contain oil runoff before it reached the storm sewers. The storm sewers in the area are dry wells which drain by percolation.

5. The solid residue remaining after processing, or "wheel" as Semans called it, accumulates at a rate of 8 barrels per day. The "wheel" consists of high speed steel, diatomaceous earth, grinding wheel powder and other debris. Currently, it is being land-filled at a cost of about \$800 per month (\$5.25/barrel). Semans proposed drying it in a pile outdoors. After drying, it would be used in a concrete mix to pave the areas around Soterion's buildings. He was referred to the Agency's DLPC concerning accepted disposal of the "wheel".

6. A letter ^{WILL BE} ~~was~~ sent to Soterion by DWPC/FOS Region 1 documenting the deficiencies found and requesting a written response outlining Soterion's proposals for resolution of the problems. Copies of the response will be sent to interested parties. Further monitoring of this facility is recommended.

DJC/svf

cc: -Region 1
-DWPC/Permit Section - Industrial Unit
-DLPC/FOS, Rockford - Attn: Jack Holzer
-DAPC/FOS, Rockford

8/11/81